

KNOWLEDGE

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OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

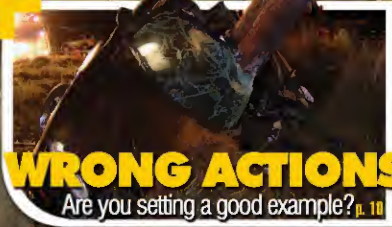
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U.S. ARMY

ARMY STRONG.



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OWN the
EDGE

Leading on the Edge

KNOWLEDGE

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

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WHEN
TROUBLE
HAPPENS



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WE'RE ALL BATTU

I've heard it said
"information is power,"
but actually believe
there's a better

description of power in relation to information. I believe that sharing of information through the transmission of knowledge thus putting intelligence into the hands of folks, who can take corrective action, is power. That is the REAL POWER. So, knowledge is power, if and when, we share. This magazine seeks to share and place power in leaders' hands.

Featuring midyear accident reviews and highlighting accident trends, this issue is a valuable tool showing leaders sitting on the dash of their car parked in the commander's parking lot? When leaders are sincerely interested in their Soldiers and the dangers that threaten them, Soldiers know "being safe" is more than a slogan. When leaders recognize that the duty day

don't have to happen. They're called accidents because, in most cases, someone could have prevented them. Had a decision been handled differently, there wouldn't have been an accident. However, making the right decision means someone has to get engaged and take action.

But who is that someone? That responsibility lies on several shoulders. For one, it is the responsibility of leadership to set the example. Soldiers note what leaders consider important and respond accordingly. What is the leader saying to his or her subordinates when they have a radar detector sitting on the dash of their car parked in the commander's parking lot? When leaders are sincerely interested in their Soldiers and the dangers that threaten them, Soldiers know "being safe" is more than a slogan. When leaders recognize that the duty day

It takes having the
**GUTS TO TAKE
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 call a taxi or be the
ONE OBSTACLE
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 or even **KILL**
THEMSELVES.

E BUDDIES

never ends when it comes to being accountable for their Soldiers—we can stop these trends.

The responsibility doesn't end there. From our initial entry training, each Soldier is taught the "battle buddy" theory for a very important reason. Just as Soldiers watch their buddy's back in combat; they must also watch their buddy's back in the seemingly less dangerous situations like driving a car or operating a motorcycle. Did you know that we lose twice as many Soldiers to accidents during off duty as we do during on-duty times? That responsibility begins before the ignition is turned. It begins when one Soldier sees another drinking, knowing he or she will get behind the wheel or astride a motorcycle. It doesn't take rocket science to foresee the consequences. It does, however, take courage—the

courage of a battle buddy to get involved. It takes having the guts to take away the keys, call a taxi or be the one obstacle that buddies can't get past to hurt or even kill themselves. An effective battle buddy intercedes prior to the crisis and is not just a willing participant in a dual death tragedy.

When is it not your responsibility and how far must you go to prevent a buddy from being a "fallen comrade?" You should know these answers and suggest this decision is thought through before you are placed in a like described situation. You hear it in the distant echoes of gunfire and the shouts of Soldiers remembered from battles in Iraq and Afghanistan. Your responsibility for your battle buddy never ended there and it doesn't end here, either. The question is do you have the courage to stand up and risk a

relationship with a buddy in order to save his or her life?

Our motto is "Army Strong!" "Army" is in the singular because we are one force wherever we are, whether it's in Baghdad, at Fort Bragg or Germany. "Strong" comes from the fact we are united. What touches one of us, touches all of us.

As we increase the support we provide making us all stronger, we are transforming the U.S. Army Combat Readiness Center by adding something that never existed at the Center before July 13, 2007. USACRC now has a Command Sergeant Major. We believe the conversion of the USACRC sergeant major slot to a command sergeant major billet clearly accents the renewed importance and higher expectations our Army Leaders demand of USACRC.

The USACRC welcomes CSM Tod Glidewell, who

brings over 25 years of service, leadership and extensive experience having led battalions and a brigade in combat. Additionally, we bid farewell to SGM David Griffith, who worked tirelessly to help transform the Soldiers' mindset in terms of safety and engaged in a committed pursuit of what is best for the Army. This change would not have been possible without Dave's great leadership.

I want you to all know that you make a difference and are important to our Nation. It matters that you return from your next patrol to finish your tour with your buddies. It matters that you come home and enjoy your family and friends without being lost to a preventable accident. It matters because in this Army Strong, we're all battle buddies—and we're battle buddies all the time. Army Safe is Army Strong! «

William H. Forrester

William H. Forrester
 Brigadier General, USA
 Commanding

USACRC WELCOMES FIRST COMMAND SERGEANT MAJOR

CHRIS FRAZIER
U.S. Army Combat Readiness Center
Fort Rucker, Ala.

The Army continued its commitment to safety transformation July 13 with an assumption of responsibility ceremony for the U.S. Army Combat Readiness Center's first command sergeant major.

Command Sgt. Maj. Tod L. Glidewell took over the senior leadership position in a ceremony at Fort Rucker's U.S. Army Aviation Museum.

Army officials approved the conversion of the sergeant major position to command sergeant major in recognition of the continued safety cultural transformation in our Army.

Transformation is a triad involving leaders, forces and institutions – all of which are critical in achieving the Army Vision, said Brig. Gen. William H. Forrester, Director of Army Safety and commanding general of the USACRC.

"Transformation is far more than an equipment change," Forrester said. "While the changes in our forces and institutions are significant in scope and breadth, they pale when compared to the positive impacts leaders can achieve."

These leaders, Forrester added, must continue the Army's transformation and set the example for their Soldiers. When leaders are genuinely interested in their Soldiers and the dangers that threaten them, Soldiers know "being safe" is more than a slogan, Forrester said.

Glidewell replaces Sgt. Maj. David P. Griffith, who served as the USACRC's sergeant major for the past six years, and brings more than 25 years of service and leadership to his new assignment. He comes to the USACRC

from the 101st Airborne Division (Air Assault) at Fort Campbell, Ky., where he served as the 101st Combat Aviation Brigade command sergeant major.

Glidewell said he is proud to be selected as a member of the USACRC team and it's a challenge he won't take lightly.

"The Combat Readiness Center is known throughout the military as an organization composed of experts and professionals that represent the best in their fields—individuals who truly care about protecting our force," Glidewell said.

In Glidewell, Forrester believes

reemphasizing the Army's leadership message on the importance of safety and protecting the force.

"I believe we can emplace methods and great cultural change that will protect our nation's greatest and most precious resource – the Army Soldier," he said.

Known as the knowledge center for Army accidental loss, the USACRC "operationalizes" safety through the use of composite risk management to more effectively preserve combat power. Forrester said leaders like Griffith, who for six years worked to bring the command

"I believe we can EMBLACE METHODS and great CULTURAL CHANGE that will PROTECT our nation's greatest and most precious resource – the ARMY SOLDIER."

Command Sgt. Maj. Tod L. Glidewell

the Army has an engaged leader who will influence safety transformation and take it to the next level.

"I believe our Army recognizes engaged leaders make a difference," Forrester said. "... Tod's tremendous combat experiences of leading both battalions and brigades in combat and his reputation throughout the Army are huge."

Glidewell hopes the new position will allow the USACRC to grow beyond the staff perspective in the minds of our Army as warfighters, therefore

sergeant major slot to the USACRC, have helped transform the Soldiers' mindset in terms of safety and the use of CRM.

"His untiring pursuit of what is best for the Army during this transformation has highlighted the value of his position," Forrester said. "This change would not be possible without his great leadership."

Griffith, who has served in the Army for more than 29 years with tenures including assignments in the Republic of Korea and the Federal Republic of Germany, plans to retire. «

HOW ARE WE DOING?

FISCAL 2007 OFF-DUTY MIDYEAR ACCIDENT REVIEW

GLEN DAVIS
U.S. Army Combat Readiness Center
Fort Rucker, Ala.

We're halfway through fiscal 2007, and it's time to assess how the Army is doing in regard to off-duty accidents. Although we're engaged in the Global War on Terrorism, it's vitally important that we continue to monitor our progress and ensure all of us are using composite risk management to prevent accidental losses.

Let's take a quick look at the off-duty accident trends for the first half of fiscal 2007. The U.S. Army Combat Readiness Center database shows accident fatality numbers are going up in privately owned vehicles, particularly in pickup trucks. Most notable is the non-use of seat belts in the most rollover-prone vehicle—the sport-utility vehicle—which has led to a high number of Soldiers being ejected and killed. While overall motorcycle fatality accidents are down, 73 percent of those accidents involved sport bikes. Weekends continue to be the most dangerous time for Soldiers, with more than double the fatal POV accident rate compared to workdays. By a noticeable margin, corporals and specialists (E-4s) are the most at-risk Soldiers for POV and off-duty personnel injury fatalities.

Privately Owned Vehicles

Halfway through fiscal 2007, the Army had 50 fatal POV accidents that claimed the lives of 54 Soldiers—an increase of two fatalities compared to the same period last year. The Soldiers who lost their lives this year include 12 privates, two privates first class, 17 specialists or corporals, 10 sergeants, four staff sergeants, five sergeants first class, two master sergeants, and two warrant officers. The graph to the right shows the losses, proportionally, according to grade.

GRADE	PROPORTION	PERCENT	SOLDIERS KILLED
E1	<div></div>	9.26	5
E2	<div></div>	12.96	7
E3	<div></div>	3.70	2
E4	<div></div>	31.48	17
E5	<div></div>	18.52	10
E6	<div></div>	7.41	4
E7	<div></div>	9.26	5
E8	<div></div>	3.70	2
W1	<div></div>	1.85	1
W2	<div></div>	1.85	1

as of May 31, 2007

Types of Vehicles

When broken down by vehicle type, there were 22 fatalities involving sedans and 11 each involving motorcycles and pickup trucks. Nine Soldiers died in SUVs and one died as a passenger in a van. Compared to last year, fewer Soldiers

or following the holiday), and 26 died during workdays. Comparing the average number of hours between fatalities, the Army lost one Soldier every 48 hours during weekends, one every 59 hours during holidays and one every 113 hours during workdays. These

helmets. Additionally, eight of the 11 Soldiers who died on motorcycles were operating sport bikes, as shown in the graph below. The two Soldiers who weren't wearing helmets when they died were operating sport bikes as well.

Seat Belts

Statistics suggest that Soldiers driving the most rollover-prone vehicles are also least likely to wear seat belts. Three of the nine Soldiers killed in SUVs were not wearing seat belts. Two of those three Soldiers who died were ejected from their vehicles. By contrast, statistics support that Soldiers in pickup trucks are most likely to wear seat belts, with only one Soldier of the 11 fatalities driving unbelted. More Soldiers in sedans wore their seat belts than those in SUVs as well. Of the 22 killed in sedans, all but four chose to wear seat belts.

Mistakes and Root Causes

The leading driver or operator mistakes in fatal POV and POM accidents continue to be speeding and abrupt steering control. Other operator errors, such as failing to wear seat belts and helmets, increase the severity of the injury. The leading root causes for these fatal accidents continue to be overconfidence, alcohol, haste and fatigue.

SOLDIER FATALITIES BY VEHICLE TYPE

	Fiscal 2006	2007	Increase/Decrease
Sedan	26	22	-4
Motorcycle	13	11	-2
POV-Other	1	0	-1
Truck	6	11	+5
Jeep/SUV	6	9	+3
Van	0	1	+1
Totals	52	54	+2

as of May 31, 2007

died in sedans or on motorcycles; however, there was an increase in fatalities involving pickup truck accidents. Overall, the Army experienced an increase of two POV-related fatalities compared to the same period last year.

Holidays, Weekends and Weekdays

Soldiers are significantly more likely to die in POV accidents during weekends and holidays than during weekdays. Of the 54 Soldiers who died during the first half of fiscal 2007, 19 died on weekends (Saturdays and Sundays not connected to holidays), nine died during holidays (including the weekends immediately preceding

results support a recent USACRC study regarding the most common times for POV accidents.

Time of Day

The "dark and early" hours are the most dangerous, with 20 Soldiers dying in POV accidents from 1 a.m. through 5:59 a.m. The worst hour—1 a.m. to 1:59 a.m.—included the deaths of seven Soldiers.

Helmets and Motorcycle Types

While most Soldiers recognize the value of wearing helmets, some still choose not to wear them. Two of the 11 Soldiers killed in motorcycle accidents were not wearing

SOLDIERS KILLED BY MOTORCYCLE MODEL/TYPE

Harley Davidson	CRUISER
Honda CBR 600	SPORT
Kawasaki 650	SPORT
Suzuki GSX 1300R	SPORT
Suzuki GSXR 600	SPORT
Suzuki TL 1000	SPORT
Yamaha R1	SPORT
Yamaha R6L	SPORT
Yamaha WZFR1	SPORT
Kawasaki-Unk	UNK
Kawasaki-Unk	UNK





“ The **LEADING** driver or operator **MISTAKES** in **FATAL POV** and **POM** accidents continue to be **SPEEDING** and **ABRUPT STEERING CONTROL**. Other operator errors, such as **FAILING** to wear **SEAT BELTS** and **HELMETS**, **INCREASE** the **SEVERITY** of the injury. ”

DID YOU KNOW?

What is the status of overall Army loss?

- Motorcycle fatalities are down 28 percent from this time last year (29 vs. 40)
- 17 percent of Soldier accident fatalities are due to motorcycles (29 vs. 170)
- 2.7 percent of all Soldier deaths occur in motorcycle accidents (29 vs. 1085)

- Of the 29 motorcycle fatalities reported so far this year:
 - Only eight were the result of action by another vehicle
 - 52 percent involved excessive speed by the motorcycle rider (15 of 29)
 - Seven of 29 reported improper PPE by the motorcycle rider (24 percent)
 - 69 percent involved


- sport bikes (20 of 29), nearly one-third of which were the 1300cc Suzuki Hayabusa (6 of 20)
 - 24 percent were senior enlisted (E-8 and above), warrants and officers (seven of 29)
 - 59 percent were E-6 and above (17 of 29)
 - Only 12 of 29 (41 percent) were combat arms INF, AR,

- ARTY, ADA Branch/MOS
 - Six of 29 (21 percent) were Medical and Dental Branch/MOS
 - 57 percent were 30 years of age or older
 - 21 percent were 40 years of age or older
 - 69 percent of the fatalities occurred in the South or Midwest (20 of 29)
- as of July 23, 2007

Off-duty Personnel Injury-Other Accidents

During the first half of fiscal 2007, the Army lost 14 Soldiers in 12 off-duty PI-O accidents, an increase of three compared to the same period last year. The Soldiers killed in these accidents include two privates, two privates first class, four specialists or corporals, one sergeant, one staff sergeant, two sergeants first class, one captain and one colonel. The graph to the right shows the losses, proportionally, according to grade.

While there were no defined peak times for these accidents, seven happened at night and nine happened on weekends. The accident reports cited alcohol as a contributing factor in two of these accidents. The following is a breakdown of these accidents:



GRADE	PROPORTION	PERCENT	SOLDIERS KILLED
E2	<div></div>	14.29	2
E3	<div></div>	14.29	2
E4	<div></div>	28.57	4
E5	<div></div>	7.14	1
E6	<div></div>	7.14	1
E7	<div></div>	14.29	2
O3	<div></div>	7.14	1
O6	<div></div>	7.14	1

as of May 31, 2007

Pedestrian

Four Soldiers died when vehicles struck them. A train hit two of the Soldiers and POVs hit the other two. One of the two hit by a POV was crossing an interstate on foot after dark.

Negligent Discharges

Negligent discharges led to the deaths of four Soldiers. Two fatalities happened while Soldiers were cleaning their weapons. A third fatality occurred while a Soldier was showing a firearm to friends. The fourth fatality involved a Soldier handling a loaded weapon.

Water-related Activities

Four Soldiers died during water recreational activities. One Soldier drowned while bodyboarding, two Soldiers failed to return after fishing in a small craft and one Soldier drowned during a commercial scuba dive.

Other

Two Soldiers died performing other off-duty activities. One Soldier was paragliding when he became

WATER SPORTS

Water sports are particularly appealing when temperatures rise. However, as enjoyable as swimming, surfing, scuba diving, fishing and boating are, people still need personal risk management to keep these activities safe. For example, between the beginning of this fiscal year and May 8, six off-duty Soldiers have drowned—one more than during all of fiscal 2006. Four of those Soldiers were in some type of boat and were not wearing a personal flotation device. Like seat belts, PFDs only help if you have them on before you need them.

How did these four Soldiers end up unexpectedly in the water? Two died when their 12-foot-long johnboat apparently sank while they

were fishing on a lake. According to local authorities, the boat was poorly equipped, having only a small trolling motor for power. A storm blew up on the lake late in the afternoon as the Soldiers were preparing to head to shore.

A third Soldier died when the pontoons on his inflatable personal pontoon boat separated while he was fishing on a reservoir. The Soldier attempted to swim back to the pier but drowned. A fourth fatality happened when two Soldiers ignored beach hazard warnings and set out in a two-man kayak. When the kayak capsized, one Soldier drowned when he got caught in a strong current. The other Soldier survived, struggling against the current to make it back to shore.

A quick review of drowning





entangled with a civilian paraglider and fell to his death. The other Soldier choked on food at a private party.

Summary

By the very nature of your work as a Soldier, you engage in high-risk activities. The Army's goal is to help you mitigate risks—including those you face off duty. When you're off duty, the choice to be safe is in your hands. As you make those decisions, never forget the odds you face if you choose to be a risk taker. To survive, you must beat the odds every time. To die, you only have to fail once. Ask yourself which is better—getting a

quick thrill, saving a couple of minutes and avoiding an inconvenience or being alive and physically whole and able to enjoy the rest of your life. It's not a hard decision. Your family, your battle buddies and the Army will be grateful if you make the right choice. ◀

Editor's Note: These statistics are current from the Army Safety Management Information System as of May 31, 2007. The fiscal 2006 statistics describe the 1st and 2nd quarter accidents reported as of May 31, 2006. Delayed reports and follow-up details on preliminary reports can change the statistics, figures and findings.

SAFETY

MARY ANN THOMPSON
U.S. Army Combat Readiness Center
Fort Rucker, Ala.

» BE ENGAGED

Leaders should educate and train their Soldiers on the hazards associated with water activities through drown-proofing and swimming classes. Know how to swim, swim only in approved areas and use the buddy system—never swim alone. Ensure your buddy makes it home safely.

accidents going back to fiscal 2002 shows June, July and October are the months with the greatest number of drowning fatalities. The most frequent hours for these accidents are 1 p.m., 5 p.m. and 9 p.m. Nearly one-third of the Soldiers who died were 20 to 22 years old. Enlisted Soldiers accounted for nearly 90 percent of the fatalities, with high numbers

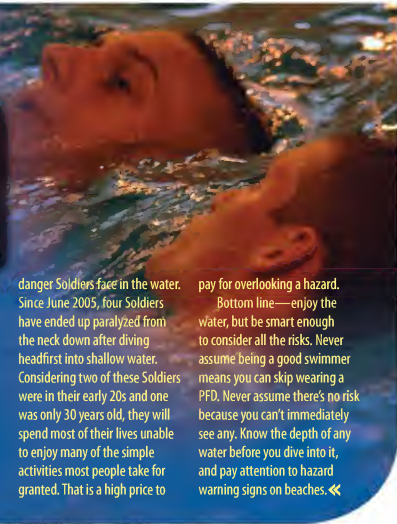
recorded as privates, specialists and sergeants. Contributing factors often included not wearing a PFD, alcohol use and rough water or strong currents. The five states with the greatest number of Army off-duty drowning fatalities were, in order: Texas, Hawaii, Georgia, New York and Washington.

Although drowning ends a Soldier's life, it's not the only

danger Soldiers face in the water. Since June 2005, four Soldiers have ended up paralyzed from the neck down after diving headfirst into shallow water. Considering two of these Soldiers were in their early 20s and one was only 30 years old, they will spend most of their lives unable to enjoy many of the simple activities most people take for granted. That is a high price to

pay for overlooking a hazard.

Bottom line—enjoy the water, but be smart enough to consider all the risks. Never assume being a good swimmer means you can skip wearing a PFD. Never assume there's no risk because you can't immediately see any. Know the depth of any water before you dive into it, and pay attention to hazard warning signs on beaches. ◀



What Kind of Example

U.S. ARMY COMBAT READINESS CENTER
Fort Rucker, Ala.

What kind of example do you set for others when making decisions affecting safety? Would you feel good if someone you cared for followed your footsteps?

Friday was a good day for the Soldiers recently assigned to the unit's rear detachment. They were well into spring and the weather was pleasant as they contemplated the three-day weekend. Better yet, the unit would release them early this day—extending their weekend further.

For eight young Soldiers, fun wasn't that far away. It was only an hour drive to a popular coastal resort island, so they agreed to drive there on Sunday. When Sunday afternoon came around, the Soldiers headed out in three cars. Two cars left the post at about 4 p.m. and headed directly to the island. The third car left about 30 minutes later with the Soldiers stopping en route for dinner. It was about 7:30 p.m. when they met their friends in a parking lot on the island.

The Soldiers hung around for about 20 minutes and then decided to return to their barracks. The highway back toward post offered one lane in each

direction with occasional short passing zones where the road was widened by an additional lane on the right. These passing zones allowed slower traffic to move out of the way to allow faster vehicles to pass them. The Soldiers were driving one behind the other while following a pickup truck. Deciding to pass the pickup truck, the Soldiers driving the first two cars illegally crossed the double-yellow line and passed the pickup truck. Moments later, the vehicles entered a passing zone, and the pickup truck pulled into the right lane. The road ahead was now open for the Soldier operating the third vehicle to pass the pickup. Seeing his buddies ahead in the right lane, the Soldier accelerated his Chevrolet Camaro to more than 90 mph to catch up.

The Camaro was quick and rapidly caught up to the other Soldiers' cars. Unfortunately, what none of the Soldiers knew was that time and space were running out. Unfamiliar with the road,



e?

they didn't realize the passing zone was less than a mile long before all traffic was forced to merge into one lane. The driver of the Camaro was about to overtake his buddies when they were forced to merge left—swerving in front of him and cutting him off. Trying to miss his buddy's car ahead, the Camaro's driver hit his brakes and steered toward the right shoulder. But he turned too sharply, and the car spun out of control in a clockwise motion. The Camaro slid sideways off the road and slammed into a high-voltage utility pole, which hit the driver-side door and tore half-way through the car and immediately killed its 22-year-old driver and his 19-year-old passenger.

The Soldiers in the lead vehicles saw what happened and stopped. One called 911 while the other ran back toward the accident. A volunteer firefighter who'd stopped at the crash warned the Soldier away because the utility pole's power lines were hot and could fall. Although police and emergency medical services reached the scene within minutes, they couldn't approach the car because of the power line danger. When rescuers finally reached the car, they had to cut it open to remove the driver and passenger.

Why did this accident happen? There are several reasons and they involve the actions of not only the driver, but his friends and leaders as well.

LEADERS must **SET** the right example by **ENGAGING** in their **SOLDIERS' SAFETY**, ensuring they're properly trained and meet **SAFETY STANDARDS.**

First, the Soldier not only exceeded the speed limit, he also drove beyond his ability. The Soldier's lack of discipline behind the wheel was no secret, as recorded in his driving history. Two years before the accident, he'd been cited for driving 106 mph in a 55-mph zone, which led to officials revoking his license. He had his license back for about a month before this fatal crash.

Second, the other Soldiers helped set him up for a fall. Their speeding and illegal passing might have encouraged him to drive recklessly. Tragically, after getting him to race, they cut him off and forced him off the road. The senior Soldier involved that day was driving the lead vehicle. Rather than setting a positive example, he helped set up a younger Soldier to be a "fallen comrade."

Third, although leaders weren't held at fault for this accident, they didn't do all they could have to prevent it. For example, they didn't ensure the Soldier had his vehicle inspected before the long weekend. As a result, no one identified the badly worn left-rear tire on the Soldier's car. The lack of tread on the tire may have hindered the Soldier's ability to regain control of the vehicle when it began to skid. Also, the Soldier didn't receive the unit-sponsored safety orientation within 72 hours of reporting for duty, which is a requirement the unit failed to meet for that Soldier and the others involved in this accident. A look at unit organization revealed that leadership assigned a junior noncommissioned officer as the platoon sergeant. As such, leadership assigned him responsibilities and tasks beyond his experience and capability. Other junior NCOs reporting to the unit performed squad leader duties. Unfamiliar with the commanding general's safety message, they couldn't explain it to their Soldiers.

So what's the fix for these problems? Much of the answer has to do with setting the right example. Leaders must set the right example by engaging in their Soldiers' safety, ensuring they're properly trained and meet safety standards.

"Battle buddies" must set the right example by protecting each other. When Soldiers lead each other to take needless risks, they're not saving a "fallen comrade"—they're creating one.

Soldiers must understand that speed limits save lives, and they can make more of an impact by setting the right example by obeying the law. Passengers must be willing to speak up when a driver is acting dangerously. The passenger in this accident was intoxicated and didn't speak up. Unable to help prevent the accident, he became one of its casualties. ◀

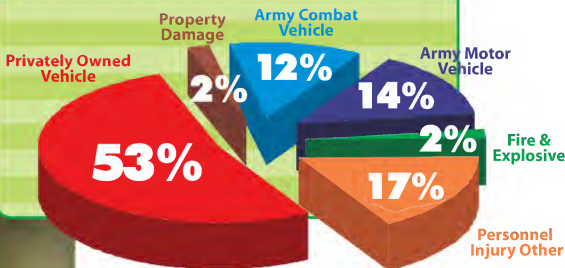
Army ground accidents and fatalities as a whole for the first half of fiscal 2007 are down from last year's numbers. While that's certainly great news, there's still plenty of room for improvement, especially in the area of Army Combat Vehicles, where there was a significant increase in accidents and fatalities. Let's look back and see what's taking the lives of our Soldiers and damaging Army equipment so we can learn from these costly lessons and move forward.

HALFWAY THERE IN '07

FISCAL 2007 GROUND MIDYEAR ACCIDENT REVIEW

MARY ANN THOMPSON
U.S. Army Combat Readiness Center
Fort Rucker, Ala.

FIRST-HALF FISCAL 2007 CLASS A ARMY GROUND ACCIDENTS



as of June 1, 2007

For the first half of fiscal 2007, the Army experienced 103 Class A ground accidents, resulting in 93 Army military fatalities. This is slightly down from the 113 Class A ground accidents and 105 fatalities for the first half of fiscal 2006. As can be seen in the graphic, 55 of the Class A Army ground accidents occurred in privately owned vehicles, 18 were Personnel Injury–Other accidents, 14 were Army Motor Vehicle accidents and 12 were ACV accidents. Of all the Class A accidents, 25 occurred during Operation Iraqi Freedom or Operation Enduring Freedom.

Army fatalities for the first half of fiscal 2007 followed the same pattern as Class A accidents for the same time period. POV accidents accounted for 54 fatalities, PI-O accidents accounted for 17, AMV accidents accounted for 15 and ACV accidents accounted for seven. The chart above is a breakdown

of each accident area. The article “How Are We Doing?” on page 5 of this issue discusses POV and off-duty personnel injury accidents during this time frame.

Personnel Injury Other Accidents

The Army had 18 Class A PI-O accidents in the first half of fiscal 2007, resulting in 17 fatalities. This was down from the 23 Class A accidents and 24 fatalities for the first half of fiscal 2006. Of this fiscal year’s PI-O accidents, 15 occurred off duty, while three occurred on duty.

The three on-duty PI-O accidents resulted in three fatalities, compared to 12 Class A accidents and 13 fatalities for the same time period last year. This year’s on-duty fatalities included a Soldier who was a passenger onboard a U.S. Marine Corps aircraft that crashed into a lake, a Soldier who became ill while participating in a physical training test and a Soldier who was believed to have been killed by friendly fire. Two of these fatalities occurred during OIF/OEF.



“CONTINUED EMPHASIS on safety and **CRM** in all Army operations is **REQUIRED** to **SUSTAIN** our **SUCCESSES** and tackle our increase in ACV accidents.”

Army Motor Vehicles

During the first half of fiscal 2007, there were 14 Class A AMV accidents, resulting in 15 fatalities. This number is also down from the 24 Class A accidents and 23 fatalities during the same time period in fiscal 2006. Nine of this year's Class A accidents occurred during OIF/OEF, resulting in 13 fatalities.

The majority, 10, of the AMV accidents occurred in tactical vehicles. The HMMWV was once again the most frequently reported accident AMV with six Class A accidents. Accidents in HMMWVs accounted for nine AMV fatalities in fiscal 2007. This was half the number of fatalities for the same time period last year.

Of the fiscal 2007 HMMWV accidents, four occurred during OEF/OIF, resulting in seven fatalities. The M1114 HMMWV accounted for three

of the HMMWV accidents and six of the fatalities. Five of the HMMWV accidents involved rollovers, three of which involved the M1114 HMMWV.

Army Combat Vehicles

There were 12 Class A ACV accidents during the first half of fiscal 2007, resulting in seven fatalities. These numbers were up from the five Class A accidents and two fatalities for the same time period last year. The most frequent vehicles involved in this fiscal year's accidents were Bradley Fighting Vehicles with eight. These accidents accounted for three fatalities.

Of the fighting vehicle accidents, three vehicles overturned into canals/water, resulting in two fatalities. In two of these accidents, the ground gave way as the vehicle was operating near the canal. In the



other accident, the vehicle's track slipped off the road as it was crossing a bridge.

Another Class A accident occurred when a fighting vehicle struck a tree, which then fell on the Soldier in the turret and caused a spinal fracture and paralysis. In another accident, a Soldier was fatally injured when he was pinned between a stationary fighting vehicle and the one he was ground guiding. The remaining Class A fighting vehicle accidents occurred when the operator of the vehicle, while performing a night patrol, lost control and veered off the road. The vehicle overturned into a ditch, causing Class A damage. Two other fighting vehicle accidents involved vehicle fires. Of this year's ACV accidents, 10 occurred during OIF and accounted for six fatalities.

Explosive and Fire Accidents

Explosive and fire accidents accounted for two Class A accidents during the first half of fiscal 2007. There was one fire and one explosive accident, the same number as for the same time period last year. One U.S. contract employee suffered fatal injuries and two others were seriously injured in this year's explosive accident when a 155 mm round detonated while being stacked at an ammunition supply point. The fire accident occurred when Soldiers were attempting to burn latrine waste and the fire spread out of control and damaged Army equipment.

Conclusion

Review of accident data for the first half of fiscal 2007 shows

an overall decrease in Class A accidents and fatalities. Engaged leaders and Soldiers are making a difference. We have reduced the number of AMV and PI-O accidents and fatalities, while explosive and fire accidents held steady.

Although some improvement has been made, there is still a lot of work to be done. Class A ACV accidents have more than doubled since last year, while fatalities in ACV accidents have more than tripled. These accidents most frequently involved Bradley Fighting Vehicles. Leaders and Soldiers should look for ways to increase involvement and integration of composite risk management into ACV operations.

Continued emphasis on safety and CRM in all Army operations is required to

sustain our successes and tackle our increase in ACV accidents. The U.S. Army Combat Readiness Center has developed a number of tools that are easy to access and use to help Soldiers and leaders manage risks. Visit the USACRC's Web site at <https://crc.army.mil> to find these valuable tools that will keep you Army Safe and Army Strong! ◀

Editor's Note: These statistics are current from the Army Safety Management Information System as of June 1, 2007. The fiscal 2006 statistics describe the 1st and 2nd quarter accidents reported as of June 1, 2006. Delayed reports and follow-up details on preliminary reports could change the statistics, figures and findings.



WHAT YOU DON'T KNOW **CAN** HURT YOU

COL JOHN CAMPBELL, D.O.
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Everyone wants to look good. But what price are you willing to pay for more reps, a higher max on your bench or six-pack abs? In an effort to boost workouts or improve their appearance, some Soldiers are turning to supplements and other performance enhancers. Unfortunately, a lot of these products on the market can be harmful, even deadly. What you don't know CAN hurt you!

You might be surprised at the number of empty cans of supplements found in our Soldiers' trash cans or outside recreation areas. Some of these products might guarantee big gains in your weightlifting routine, while others lure consumers with the promise of quick weight loss or increased energy. Truth be told, many of these "miracle cures" offer nothing but empty promises and maybe a trip to the emergency room.

Generally, manufacturers don't need to register their products with the Food and Drug Administration or get FDA approval before producing or selling dietary supplements. They must, however, ensure the product label information is truthful and not misleading. While this looks good on paper, some advertisements and word of mouth can be misleading and misinforming.

Some dietary supplements marketed for performance enhancement and weight loss, as well as some over-the-counter products such as cold or allergy remedies, can be harmful when ingredients are combined.

Some particularly risky combinations include mixing products containing caffeine with products containing ephedra or ephedrine-like substances and aspirin. A number of new "energy" drinks also have potentially harmful substances when used in excess or as the only source of nutrition.

Possible side effects from such combinations include high blood pressure and abnormal heart rhythms.

Mixing these substances may also put you at greater

risk of becoming a heat casualty because they can cause dehydration. Caffeine-containing substances include guarana, coffee, cocoa, green tea, black tea, oolong tea, cola nut and mate. Ephedrine-like substances include many cold remedies (pseudoephedrine), bitter orange/citrus aurantium (synephrine), country mallow, heartleaf and ma huang. Despite the fact that ephedrine supplements have been banned for sale in the United States, these products are still available internationally and can be purchased illegally stateside.

Reading the labels of all purchased dietary supplements and cold remedies is critical. Soldiers should avoid products such as Lipo 6, Speed Shot, Blaze and Nitro Shot, as they contain significant amounts of caffeine in combination with herbal mixtures. Soldiers also should consider the caffeine content of any foods and beverages they consume in addition to any supplements.

Officials recommended avoiding dietary supplements and other self-care products containing combinations of ephedrine-like compounds, caffeine-containing substances and aspirin. Soldiers also should ensure their healthcare provider is aware of what dietary supplements and other self-care products they are using. Individuals taking these substances should maintain hydration by drinking adequate fluids.

Leaders need to be aware of what their Soldiers are putting into their bodies by staying engaged in all aspects of their on- and off-duty activities. Staying engaged and keeping Soldiers healthy helps keep our Army Strong! «



Visit the Army Knowledge Online "HOOAH Bodies" Web page at <https://www.us.army.mil/suite/portal/index.jsp> for more information. The site is designed to assist Soldiers with improving their health and performance and provides real-time classes, presentations and dietary supplement alerts. An AKO username and password is required to enter the site. Check out the National Institute of Health's Office of Dietary Supplements at <http://dietary-supplements.info.nih.gov/> for additional information.

Heat injuries are a reality the Army must be prepared for and take measures to prevent. Overall, Army members do this very well considering the environmental conditions they face in Iraq and Afghanistan. Temperatures of 130-plus degrees create conditions that are hazardous to everyone exposed to them. The unfortunate part of this story is that the vast majority of the heat-related fatalities occur far from the battlefield. Most happen during training in what should be controlled environments. Five fatalities in the last five years have come during simple land navigation courses—exercises that should be completely controlled by the chain of command.

NAVIGATING THE H

At the time this article was written, a U.S. Army Combat Readiness Center accident investigation team was at a major Army installation investigating a heat-related fatality. Unfortunately, the Soldier died the same way several other Soldiers over the last few years have died—trying to complete a record land navigation course. As of June 26, 2007, the investigation into this accident is still ongoing. The details are incomplete, but there is a trend that does not depend on the analysis of this investigation.

Leader Course, formerly known as the Primary Leadership Development Course. The other two accidents occurred during training where the Soldier was separated from his parent unit preparing for deployment or an advanced qualification course.

A "for record" land navigation course presents unique risk management challenges that are different from almost every other situation leaders face. By definition, the exercise takes small-unit leaders and the buddy system out of the

motivated, unwilling to give up and intent on successfully completing the exercise. This motivation, along with the individual nature of the task, sometimes conspires to lead Soldiers to forget the safety briefing, the Lost Soldier Plan or the hydration plan.

All four of the earlier accidents happened between May and August on installations that are notorious for hot summers. The entries in the database for each heat fatality indicate the heat index, driven by the wet-bulb, was category IV or V. These conditions normally call for limited duty and specific work-rest cycles. For example, if you were to consider a land navigation course to be moderate work (walking between 2.5 and 3.5 mph with a light load), Army guidance calls for a work-rest cycle of 30 minutes of work and 30 minutes of rest each hour under category IV conditions.

Everyone who has ever done a land navigation course

knows you can't rest for half the time allowed and still complete the course. Category IV conditions also call for consumption of one quart of water per hour. Soldiers often head out on three- to four-hour exercises with only two quarts of water. So what are we to do? Most organizations go to great lengths to ensure enough water is available, there is a detailed Lost Soldier Plan and leaders rove throughout the training area while the students are on the course. Despite these efforts, we still lose one Soldier each year during these exercises.

The U.S. Army Center for Health Promotion and Preventive Medicine provides some excellent guidance for preventing heat injuries. The CHPPM Web site at chppm-www.apgee.army.mil/heat/ provides everything from Army-level guidance to pocket resources for leaders. Below are some considerations that might help prevent the next "land nav" fatality.

FIVE FATALITIES in the last **FIVE YEARS** have come during simple land navigation courses—exercises that **SHOULD BE COMPLETELY CONTROLLED** by the chain of command.

Since July 2002, the Army has lost four Soldiers, not including the current investigation, to heat injuries during land navigation courses. That's an average of one death per year. The current accident and one earlier this year, along with another in 2005, occurred during the Warrior

possible controls available to ensure Soldiers comply with hydration and work-rest cycles. By design, Soldiers are sent out alone with only sporadic contact with others as they move from point to point. The Soldiers, usually very junior noncommissioned officers and officers, are generally highly



Start early. All four of the Soldiers in the earlier accidents became unaccounted for in the afternoon, when temperatures were at their highest. By starting three hours earlier, the Soldiers could have avoided the category IV or V heat conditions. While programs of instruction and training schedules often seem inflexible, take the time to make the changes.

Thoroughly review the health of your Soldiers. This review should occur on at least two levels. First, before a Soldier goes to a course that will include exposure to heat, his chain of command should thoroughly review each Soldier's medical fitness. They should then inform the cadre at the school of any irregularities that might affect the Soldier's ability to cope with extreme weather conditions. Second, and this is the harder one, Soldiers must not hide medical conditions from the chain of

command. Soldiers should inform cadre staff if they're ill, taking medications or have had a prior heat injury. While none of us want to be identified as whiners, if you have a previous heat injury, high blood pressure or any other condition that affects your ability to deal with heat and humidity, tell someone. At least two of these five Soldiers who suffered fatal heat injuries had conditions that put them at higher risk than their contemporaries. The cadres did not know of these conditions.

Acclimate. The CHPPM Web site and Field Manual 21-20, *Physical Fitness Training*, discusses acclimatization for Soldiers, and following the guidance there will help prevent heat injuries. However, don't assume that because a Soldier is assigned to Fort Polk, La., that he's fully acclimatized. A supply sergeant at Fort Polk who does physical training every morning and then spends

the day in an air-conditioned supply room is not acclimated. It takes up to two weeks to become acclimated.

Don't depend on the individual. Despite the fact the Soldiers discussed above were at least sergeants and normally would be considered leaders, Soldiers are "lone Soldiers" when they go out alone. Lone Soldiers are prone to individual mistakes and often don't recognize their own limitations as they press to ensure they finish on time and on target. Evaluate your plan to ensure individual mistakes made by Soldiers wearing the insignia of leaders are accounted for.

Leaders in our Army must know how to navigate to lead their units in combat. Basic land navigation is a skill we must ensure leaders have, and the individual "for record" land navigation course is what the Army developed to teach that skill. That being the case, it's up to the leadership that sends Soldiers out onto the

course to take every action possible to ensure their safety.

Of course, some people might dismiss this and say, "It's always Cat V in Iraq." For several months each year, that's true. But in Iraq, no Soldier goes out alone. There are always Soldiers ensuring another's safety. On a land navigation course, a Soldier is out there alone. We must shape the situation to ensure a Soldier's individual mistakes don't have catastrophic results.

Although commanders and supervisors are responsible for heat injury prevention, every Soldier can also do his or her part by using the buddy system. Each Soldier should be an extra set of eyes and ears for the supervisors and commanders. All heat injuries—on the battlefield or in a training environment—are preventable, but like everything else, a team effort is always the best way to "navigate the heat." ◀



LET'S CHECK OUR PROGRESS

FISCAL 2007 AVIATION MIDYEAR ACCIDENT REVIEW

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The Army continues to deploy many of its Soldiers in high-risk operations, particularly in support of the Global War on Terrorism. This has an effect on the accident reports filtering into the U.S. Army Combat Readiness Center. Therefore, this article will concentrate on a review of only Army Aviation Class A and B accidents.

During the first half of fiscal 2007, Army Aviation experienced 14 Class A and B manned aircraft accidents, a decrease from last year's 27. There were 12 Army Soldiers, one Air Force Airman and one Department of Army Civilian killed in these accidents, which cost more than \$44 million. Four of the 14 accidents occurred in the Central Command area of operations, with one in Korea. The majority of these accidents (64 percent, or nine) occurred in CONUS. The chart on page 21 compares the number of accidents and fatalities for each aircraft type involved. Details of these accidents follow.

AH-64 Apache

The Apache community accounted for three accidents during the first half of fiscal 2007: one Class A that resulted in two Army military fatalities and two Class B incidents.

The Class A accident aircraft was Chalk 2 in a flight of two Apaches in Iraq at night. The flight attempted to return to base from the forward arming and refueling point after completing a night combat reconnaissance and security mission. The pilot in command of Chalk 2 asked lead to turn around because of decreasing visibility. The lead aircraft began a left turn and Chalk 2 followed. The Chalk 2 pilot was on the controls and initiated the left turn. About halfway through the turn, the PC asked for and assumed the controls. It is suspected that the PC experienced spatial disorientation during this turn. After relinquishing the controls, the PI never monitored

the PC's actions nor alerted him to the rate of descent and bank angles in sufficient time to prevent impact. The aircraft continued to descend in a left turn and impacted the ground, destroying the aircraft and fatally injuring both pilots.

The two Class B accidents involved engine overspeeds, one reportedly as a result of materiel failure and the other as a consequence of maintenance error. Concerning the materiel failure, the crew reportedly received a HIGH ROTOR indication on final approach, followed by a No. 2 engine-out audio indication. Inspection

revealed transmission and main rotor system damage. The second accident occurred because a mechanic omitted a step in the engine reinstallation procedure which was not detected by the technical inspector. This subsequently resulted in an overspeed condition during a ground run that could not be arrested by the crew and caused the aircraft to pitch and roll.

OH-58D Kiowa Warrior

The KW community was involved in one Class A with no fatalities and two Class B accidents during this timeframe.

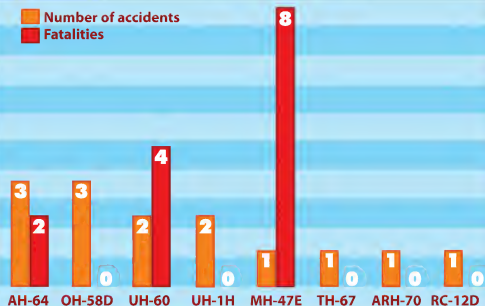
- The lead OH-58D(R) of a Scout weapons team was conducting a night convoy security patrol when they experienced an engine malfunction, descended rapidly and crashed. Both crewmembers sustained major injuries. The PC's delayed response to the engine malfunction, coupled with the lack of assistance from the PI, increased the severity of aircraft damage and injuries.

- An OH-58D(R) broke through the ice during a precautionary landing on a frozen body of water, resulting in structural aircraft damage but no reported injuries.



CLASS A-B AVIATION ACCIDENTS DURING FIRST HALF OF FISCAL 2007

Number of accidents
Fatalities



as of June 5, 2007



■ An OH-58D(R) incurred an overtorque condition (a reported NP indication of 140 percent for three seconds) during an out-of-ground effect hover.

UH/MH-60 Black Hawk

During this timeframe, the Black Hawk community was involved in two Class A accidents in CONUS, resulting in four fatalities.

■ Three Soldiers were fatally injured when their UH-60 struck the side of a mountain and crashed. The crew was performing single-aircraft visual flight rules night vision goggle currency training when they encountered heavy snow showers mixed with rain. The aircraft descended to 1,100 feet

and crashed into a heavily wooded, 45-degree slope. It was concluded that the crew failed to maintain VFR minimum requirements and, after encountering instrument flight rule conditions, failed to properly perform inadvertent instrument meteorological conditions recovery procedures. There was a sense of urgency to complete the flight because one of the pilots would become noncurrent for NVGs in one day.

■ While on a basic combat skills training flight, the pilot attempted to conduct a roll-on landing during his first flight in the left seat. The approach was too fast and the aircraft was not properly aligned with the runway. On touchdown,

the aircraft landed hard and the main rotor flexed down and struck the tail rotor driveshaft, causing loss of aircraft control. The aircraft was destroyed in the subsequent crash sequence and the Department of the Army Civilian instructor pilot received fatal injuries.

CH/MH-47 Chinook

The Chinook community had one Class A during this timeframe: an MH-47E engine failure in theater. The aircraft was Chalk 3 in a flight of three conducting a night troop movement when it incurred an engine failure. The crew slowed the aircraft, intending to achieve single-engine airspeed. It is suspected they became distracted in the cockpit and allowed the aircraft to slow below sustainable single-engine airspeed. The rotor RPM began to droop and the aircraft fell almost vertically to the

ground. The aircraft was destroyed, eight occupants were killed (seven Army and one Air Force) and 14 passengers were injured. The flight had encountered unforecasted, deteriorating weather and was executing IIMC breakup procedures before the engine failure.

UH-1 Huey

The Huey community was involved in one Class A wire strike and one Class B dynamic rollover during touchdown in a confined area.

■ The wire strike occurred while on a day personnel movement mission in mountainous terrain. The aircraft was flying about 350 feet above ground level and 60 knots when it struck a set of wires while approaching the crest of a hill. The PC began an autorotative descent with power. As he applied collective at approximately 40 feet, the aircraft yawed

right, impacted the side of the hill and came to rest upright. One pilot and one passenger were seriously injured. The crew had been flying below the published minimum safe altitude without using a hazards map.

- During a day single-ship training mission, a UH-1H reportedly overturned upon landing to a confined area during a training iteration.

TH-67 Creek

The TH-67 was involved in one Class B accident. During the termination of a standard autorotation, the aircraft reportedly yawed and landed hard.

ARH-70 Armed Reconnaissance Helicopter

During the initial test flight, the crew experienced a fuel pressure low warning signal, followed by an engine failure. The crew executed an autorotation, but upon ground contact, the aircraft overturned and incurred major damage. There were no reported injuries.

Fixed Wing

The fixed-wing community experienced one Class A accident involving an RC-12D landing gear failure. While preparing for landing, the crew noticed a landing gear unsafe light

indication and executed emergency procedures. Initial contact with the airstrip was uneventful; however, slightly past 1,000 feet, the right main landing gear collapsed. No injuries were reported.

Summary

Statistically, we are doing better this fiscal year than last; however, the loss of any life is a tragic event, whether it occurs while engaging the enemy or as a result of an accident. A breakdown in crew coordination contributed to two of the accidents. In both cases, the pilot not on the controls did not assist the pilot on controls during an in-flight engine failure.

There were four reported engine failures, all involving different aircraft. Five lives were lost and two aircraft were destroyed due to IMC.

Ultimately, accidents seriously impact our ability to fight and win this war on terrorism. The fact that we lost 14 people clearly reinforces that aviation is an inherently dangerous profession where military and civilian personnel willingly put themselves in harm's way every day to protect America's freedom. Engaged leadership, good composite risk management practices and better aircrew coordination can have a positive effect on reducing aviation accident rates. Army Safe is Army Strong! <<

Editor's note: These statistics are current from the USACRC database as of June 5, 2007. The fiscal 2006 statistics describe the 1st and 2nd quarter accidents reported as of June 5, 2006. Delayed reports and follow-up details on preliminary reports could change the statistics, figures and findings.

OIF & OEF ARMY HELICOPTER CLASS A-D MISHAPS, FY06-FY07

Most accidents occur within the first & last 90 days of deployment



Days Into Deployment Before Accident

The technological advances in the cockpit of today's aircraft place great demands on crewmembers. The volume of information bombarding the senses during night combat operations can be overwhelming. Add to this the volume of information an actual in-flight emergency can impose, and the crew can quickly fall behind the aircraft.

During an Operation Iraqi Freedom combat mission, the lead aircraft was one of two OH-58D(R) aircraft providing convoy security support. Approximately 3.2 hours into a four-hour mission, the lead aircraft experienced a catastrophic internal engine component failure. The trail aircraft, located about one kilometer to the left rear, observed under night vision goggles what appeared to be flashes of red light, which they believed was the anti-collision light of the lead aircraft.

In reality, the flashes were coming from the lead aircraft's malfunctioning

engine. As the engine RPM began to decrease, the full authority digital electronic control system attempted to maintain and increase the RPM back to its normal operational range. Several surges of turbine gas temperature were generated due to the increase of fuel supplied to the combustion section at the onset of the malfunction. The air mission commander, flying trail and approximately 100 feet higher than the accident crew, attempted to contact the lead aircraft to determine why they had changed their lighting configuration.


Receiving no response, they then watched the lead aircraft descend rapidly to the ground.

Electronic source collection data indicated the aircraft decelerated at approximately 130 feet above ground level and the nose pitch attitude reached 33 degrees. The aircraft initially contacted the tail stinger, causing the main gear to impact in a near-level, nose-down attitude. The left skid tube

assembly and the M-296 .50-caliber weapon system dug into the soft ground, compressed and spun the aircraft to the left about 170 degrees. The main fuel tank ripped from the airframe as it broke open. The vertical fin assembly and the tail rotor gearbox assembly separated from the aircraft as the tailboom folded along the left side. The cockpit airbag system deployed and the right side lateral

NO MARGIN FOR ERROR

U.S. ARMY COMBAT READINESS LIGHTS
Paul Springer, AIAA



airbag was collapsed by fuselage wreckage debris during the crash sequence. The aircrew living space was compromised and the cockpit dashboard collapsed onto the crew, crushing the pilot in command's left leg.

Lessons learned

A timely and correct response to an engine malfunction in the OH-58D is critical to aircrew survival. The airspeed and altitude of the lead aircraft at the onset of the malfunction was 98 knots indicated airspeed and 325 feet AGL, which put the accident

aircraft in the "safe area" in accordance with Figure 9-2 of Technical Manual 1-1520-248-10, Height Velocity Diagram. The warning on the height velocity chart states "collective delays used to establish this chart varied from no delay to a maximum of 1.0 seconds, which is significantly less than the two-second delays normally used to establish height velocity diagrams." The engine lost self-sustaining speed in five seconds (gas producer speed dropped below 55 percent \pm 3 percent) from the onset of the malfunction. The engine data indicated a flameout at four seconds. The PC, in the right seat, did not change collective position for six seconds following onset of the malfunction, which caused the main rotor speed to decrease rapidly from 101 percent to 58 percent during that delay. The accident investigation board suspects the crew was confused by

the conflicting low rotor warning indications while TGT kept climbing to maximum. Rotor available at impact was 50 percent NR with an approximate rate of descent of 3,000 feet per minute.

Since there is no compatible synthetic flight training system for the OH-58D, it is imperative that aviators practice Aircrew Training Manual Task 1074, Respond to Engine Failure at Cruise Flight, as often as possible. This task must be trained and evaluated while using NVGs and the maneuver must be performed as a power recovery before 200 feet AGL and a termination with power 3- to 5-feet AGL to develop an instinctive response to in-flight engine malfunctions. Aviators need to practice good aircrew coordination techniques during emergency procedures training to ensure all members perform their duties properly during an actual in-flight emergency. «

GUARDING CITIZEN SOLDIERS

North Carolina offers some spectacular opportunities for motorcyclists who want to feel the road and enjoy breathtaking scenery. Few roads can match the "Tail of the Dragon" at Deal's Gap, N.C. But the 11 miles of U.S. Highway 129, punctuated by 318 twists and turns, can bite along with many other roads when motorcyclists are unwary.

Many of the state's 158,000 registered riders also serve in the North Carolina National Guard. For some of them, May 2005 wasn't a good month. A disturbing increase in motorcycle accidents caught the attention of state Guard safety leaders. Seeing a negative trend, they decided to come up with a positive answer.

Under the leadership of LTC John Mullinax, Army National Guard state safety manager, and Senior Master

Sgt. Allen McGaha, Air National Guard state safety NCO, the North Carolina National Guard decided to train 10 Motorcycle Safety Foundation-certified Rider Coaches. Guardsmen from both the Army and Air National Guard attended a two-week training course at facilities in Badin, N.C. The training included both classroom training and hands-on riding experience. Each guardsman completing the MSF Basic Rider Course also learned to teach the

course and, in the process, earned their Rider Coach certification. Beyond training Rider Coaches, the Guard also scheduled MSF Experienced Rider Course classes for guardsmen who wanted to expand their riding skills.

According to LTC Mullinax, these courses have made the North Carolina National Guard's safety program the most proactive safety program in the state. He added that attendance has been high, with Soldiers and Airmen expressing positive feedback. The training, in cooperation with the North Carolina Highway Patrol and the North Carolina Motorcycle Safety Education Program, allows riders to earn the waiver needed for a motorcycle endorsement on their licenses. Additionally, guardsmen who complete the Experienced Rider Course can use their certification card to register



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• Phone: 1-800-855-8888

Chris [redacted]

WHO RIDE

CWS MAX DRY
North Carolina Army National Guard

their motorcycles on military posts. As another plus, they're also given a highly visible riding vest that meets the standards of all military installations.

The training is provided at no cost to guardsmen to encourage their participation. Classes are taught at four locations throughout the state, with the maximum class size being 12 students. The classes are popular and typically fill up quickly.

LTC Mullinax said concerned leaders can help reverse the upward trend in motorcycle accidents by taking a positive approach and supporting MSF training and mentorship programs. He said the state Guard's goal is to ensure its Soldiers and Airmen safely enjoy riding for many years to come. For more information on the MSF Basic RiderCourseSM, e-mail knowledge@crc.army.mil. <

KNOWLEDGE IS THE SUM OF ALL OUR EXPERIENCES!

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History repeatedly proves that lessons learned through personal experiences and eyewitness accounts provide a wealth of mishap prevention information. Unfortunately, most of this information remains unknown, except to those directly involved in the accidents. To enhance our knowledge and yours, tell us your personal experiences and the things you've seen or heard that taught you some valuable safety lessons. Anything that has helped you can help others—provided you share the knowledge.

We also encourage you to send photographs that can enhance or clarify what you saw, heard or experienced. Please e-mail them, along with your story, to knowledge@crc.army.mil. You'll receive full credit for anything we publish unless you specify that you'd like to remain anonymous. Additionally, include appropriate contact information such as your e-mail address and telephone number so we can contact you if necessary to clarify any facts.

We look forward to hearing from you soon! <

TRAINING IS NEARLY APPROACHING

The Secretary of the Army and Chief of Staff, Army, Safety and Occupational Health Objectives for fiscal 2007, dated Oct. 13, 2006, require all Soldiers and Army Civilian employees to complete the Composite Risk Management Basic Course. Soldiers and Army civilians must do so no later than Sept. 30, 2007. The CRM Civilian Basic Course is one of several courses identified by the Director of Army Safety that will satisfy this training requirement. Though Army civilians support Soldiers, that support is hindered when they are injured or killed while participating in high-risk or unsafe activities. The CRM Civilian Basic Course teaches

Army civilians how to identify hazards and mitigate risks whether they're on or off duty. The CRM Civilian Basic Course is now available through the Combat Readiness University Web site. The course takes about one hour to complete; however, viewing supplemental information (links, rollovers, etc.) and server speed can extend the course completion time. Visit <https://safetylms.army.mil/courses/c1946/eoc.asp> to access the CRM Civilian Basic Course through the Combat Readiness University Web site. Army Safe is Army Strong!

Schooling Your Kids



As summer draws to an end, children are beginning to switch their focus from swimming, camping and other fun outdoor recreational activities to heading back to school.

While some children will be enrolled in school for the first time, other "veterans" will be looking forward to progressing to the next grade and all the new challenges, teachers and friends that come with it. This is also a crucial time for parents to think about

the well-being of their children and develop strategies to get them back and forth to school safely each day. The following are some tips to make your children's trips to and from school safe whether they walk, bicycle, ride the school bus or travel by automobile.

Walking

Children should never walk by themselves. We are frequently bombarded with media accounts of attacks or abductions of children by predators. Because of that, it's particularly important to walk with your child or, when you decide they're old enough and mature enough to safely do so, allow them to travel with friends. Instruct your child to stay away from parks, vacant lots and other places where they might become isolated and an easy target for a predator.

Carefully research the route your child will travel to school, looking for well-trained adult crossing guards at each intersection. The route should be the most direct one from home to school. Make sure your child understands the importance of obeying all traffic signals and following the instructions of the crossing guards.

Instruct your child to avoid strangers and never accept rides or engage in conversation with people unknown to your family.

Ensure your child wears brightly colored clothing to help motorists see them.

Bicycling

The majority of rules regarding walking also apply to children who ride their bikes to school. Always ensure your child always wears a bicycle helmet that meets U.S. Consumer Product Safety

in Safety



Commission, Snell, American National Standards Institute or American Society for Testing and Materials safety standards.

Make sure your child's clothing is appropriate for biking. Avoid ill-fitting clothing that can become tangled in spokes or pedals or inhibit the child's movement while riding.

Riding the bus

Ensure your child arrives at the bus stop early and instruct them not to play in the street while waiting for the bus to arrive.

Your child should understand the importance of waiting for the bus to come to a complete stop before approaching the street. Also, warn them to watch for other vehicles near the bus stop.

Once aboard, children should remain seated at all times and keep their head and arms inside the bus. When exiting, they should use the handrail to avoid falling.

Wait for a signal from the bus driver before crossing the street. Walk at least 10 steps away from the front of the bus so the driver can see you.

Never cross the street or play behind the school bus.

After getting off the bus, move immediately onto the sidewalk and out of traffic. If there is no sidewalk, try to stay as far to the side of the road as possible.

Traveling by automobile

All occupants should have their seat belts securely fastened. Small children should be secured in a car seat that is appropriate for their age and size.

Drivers should be careful around children who are walking or riding bicycles to school and comply with the posted speed limit within school zones. Remember that children often engage in horseplay and can sometimes run into the road, unaware of the vehicles around them.

Another important consideration is protecting children who will be by themselves when they arrive at home each day. Typically referred to as "latchkey kids," the most important ground rules parents need to establish for these children are:

Establish a check-in time. Once a child arrives home each afternoon,

the first thing they should do is phone a parent and let them know they're at home and everything is OK.

Security. Children should be instructed to keep doors shut and locked at all times. They should also be given clear guidelines of what they can and can't do. For example, children should not try to use the stove, as they can be burned or start a fire.

A final consideration is for those children wearing backpacks to school. Recent studies show that backpacks are often overloaded, causing an unnatural compression of the spine as the child compensates for the weight by bending forward or walking with an arched back. This can result in injuries that can last a lifetime. A solution is to limit items in the backpack to only those necessary for class work. Additionally, items placed in the backpack should be evenly distributed, and the backpack should be equipped with features such as padded straps. Some backpacks are now equipped with wheels and towing handles for convenience.

School should be a fun and exciting time for children; following these precautions will help make it a safe time, as well. <<

WHEN TROUBLE HAPPENS

BOB VAN ELSBERG
U.S. Army Combat Readiness Center
Fort Rucker, Ala.

I'd been driving all day. I started in the morning in San Antonio, Texas, and was planning to spend the night in Gulfport, Miss. As timing would have it, I hit Baton Rouge, La., during the afternoon rush hour. While Interstate 12 eastbound was still moving at a pretty good clip, traffic was definitely jammed together.

Ahead of me in the fast lane was a tractor-trailer running parallel to another big rig in the right lane. I felt like a running back with two huge offensive linemen blocking for me. If there was any trouble ahead, they'd get to it first. As long as I kept a two-second or longer following distance, I felt safe from anything ahead.

I was keeping my distance and watching the road when I saw something absolutely incredible. A short distance ahead, a man ran across the westbound lanes, crossed the concrete median and stepped into the emergency breakdown lane on my side of the median. I assumed he'd see us approaching him on his right and wait until we passed before trying to cross. I was wrong! Without so much as glancing, he stepped in front of the semi-trailer I was following. The driver hit his brakes and swerved toward the median while the truck driver in the right

lane braked and swerved toward the right-hand shoulder. I pushed on my brakes firmly but gradually, allowing the drivers behind to slow down without rear-ending each other. As I looked ahead, I fully expected to see the man's body tumbling from beneath the semi.

Amazingly, both truck drivers missed him and he made it across both lanes in one



Visit the **ROADTRIP AMERICA** Web site at www.roadtripamerica.com/DefensiveDriving/Drive-Safe-With-Uncle-Bob.htm for additional defensive driving tips.



piece. I was stunned by what I'd just seen. Who in their right mind would do something so suicidal?

This reminded me how quickly and unexpectedly trouble can happen. People can do the most unpredictable things that you can't possibly plan for if you tried.

So what can you do? The answer is to drive defensively. Ask yourself, "What is the worst possible thing that can happen?" and "Do I have a plan for that?" You can't always predict what others will do, but you can drive so you've got options if the worst happens. Here is a

- Signal well in advance before changing lanes and look before pulling over.

- Don't drive too fast or too slow. Pick a speed where you can stay with traffic while keeping an open space around you as an escape route.

- Warn drivers behind you by turning on your hazard warning lights if you have to suddenly stop or slow down on the highway.

- Don't drive alongside big trucks longer than necessary. If the driver unexpectedly moves into your lane, you can be without an escape route.

- If you're being tailgated,

“YOU CAN'T always **PREDICT** what others will do, but you can drive so **YOU'VE GOT OPTIONS** if the worst happens.”

selection of safety tips to help drivers avoid the unpredictable:

- Scan the road ahead for potential dangers. Watch for brake lights or people suddenly swerving or changing lanes. The sooner you spot a problem, the more time you have to react.

- Be aware of traffic. Use your mirrors to keep track of vehicles around you.

Keep a two- to three-second following distance behind vehicles so you'll have room to stop during emergencies. This is especially true of big trucks. Not only do they block your vision, a blown truck tire can send a chunk of rubber hurtling through your windshield.

- Avoid large packs of traffic. They are particularly dangerous because they're typically caused by impatient drivers tailgating one another.

- See and be seen. Keep your windows clean, especially at night. If you don't have daytime running lights, use your headlights so others can better notice you.

- Hang up and drive. Studies show it's dangerous to concentrate on doing two things at once.

either change lanes or pull over and let the tailgater pass.

- Never drive over an object in the road that can safely be avoided. A plastic bag or cardboard box can conceal more dangerous items.

- Watch for other drivers talking on cell phones and understand their driving skills may be impaired.

- Avoid banged up "clunkers"—the collection of dents may reflect the owner's driving history.

- Watch the movements of other vehicles on the highway. If a car is weaving or speeding up and slowing down, the driver may be intoxicated or distracted. Avoid these vehicles.

A final question

Did you see composite risk management mentioned in this article? It's there. It's important to understand not all hazards are immediate and obvious. Some risks can only be anticipated and imagined. Still, that doesn't mean they're any less real. Defensive driving buys you time to identify, assess and control unpredictable hazards. When all else fails, it can be your ace-in-the-hole when trouble happens on the road. «



AVIATION

AH-64



CLASS A D Model

■ The aircraft experienced separation of the tail rotor assembly during flight, resulting in Class A damage to the aircraft. The crew maneuvered the aircraft back to the forward operating base.

CLASS C

■ The aircraft descended to ground impact during a night crew combat training flight. The crew was transitioning to night vision goggles following a

TADS/FLIR FAIL indication and a series of electrical anomalies.

MH-60



CLASS C L Model

■ The aircraft's main rotor blades contacted the ALQ-144 during a roll-on landing, resulting in damage to all four blades.

OH-58



CLASS A D(R) Model

■ The crew was in their second iteration of day, live-fire gunnery training when the aircraft impacted the ground while making a low-

altitude turn. The aircraft was destroyed and both crewmembers suffered major injuries.

CLASS C

■ The aircraft incurred an NP overspeed condition (117.82 percent for 1.8 seconds) during manual FADEC operation.

UH-60



CLASS C A Model

■ The forward left cabin window separated in flight. Inspection revealed damage to all four tail rotor blades.

CLASS C

■ The MRB made contact with the tail rotor driveshaft cover and ALQ-144.

CLASS B

L Model

■ The aircraft contacted a tree during a passenger-orientation flight, resulting in damage to the main rotor system and right side of the fuselage. No injuries were reported.

DO WE ALLOW OURSELVES TO BECOME COMPLACENT OR OVERCONFIDENT JUST BECAUSE IT'S A "LOW RISK" MISSION?

CLASS B

■ The crew conducted an emergency landing after they felt vibrations coming from the rotor system. Inspection revealed damage to the tail rotor and tail rotor gearbox.

UAS

RQ-7B



CLASS B

■ The unmanned aircraft system failed to respond to control input during flight. Attempts to deploy the chute failed and the system entered the water.

CLASS C

■ The UAS's RPM dropped rapidly to 4,000 with fluctuations, in which the aerial vehicle operator was unsuccessful in getting the UAS to respond. As a result, the chute opened and the UAS crash landed.

GROUND

ACV



CLASS A

■ Two Soldiers were injured when

the M1126 Stryker they were riding in struck a tree and overturned. The driver of the vehicle was attempting to avoid contact with another Stryker when the accident occurred.

CLASS A (DAMAGE)

■ An M2A3 Bradley Fighting Vehicle caught fire and was damaged.

AMV



CLASS A

■ A Soldier was killed and another Soldier was injured when the M1075 they were riding in overturned. The Soldiers were transporting barriers when the driver lost control while making a turn.

CLASS A (DAMAGE)

■ An M198 howitzer was destroyed and an M1083 LMTV was damaged when the commercial Heavy Equipment Transporters carrying them ran into each other and a post-crash fire ensued.

CLASS B

■ A Soldier suffered a permanent partial disability when he was struck by a HEMTT. The Soldier was ground guiding the vehicle into the motor pool when the front tire struck his foot, causing him to fall. The HEMTT then moved forward over the Soldier.

CLASS B

■ Three Soldiers were injured when the non-tactical vehicle they were riding in overturned. Two of the Soldiers were thrown from the vehicle, while the driver was trapped inside.

CLASS B (DAMAGE)

■ An M1114 HMMWV and its onboard equipment were damaged when the vehicle caught fire during a convoy mission.

ARMY AIRCRAFT LOSSES

FY02 to Present
thru July 25, 2007

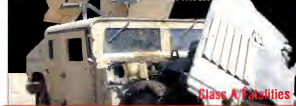


AH-64A/D	11/47
U/MH-60A/L	9/26
C/MH-47	7/14
OH-58D	11/24

TOTAL 38/111

ARMY GROUND LOSSES

FY02 to Present
thru June 2007



AMV	21/19
ACV	13/7
PERSONNEL INJURY <small>includes weapons handling accidents</small>	42/41
FIRE/EXPLOSION	2/0
PROPERTY DAMAGE	2/0

TOTAL 80/67

DRIVING

POV



CLASS A

■ A Soldier was on leave driving a sport-utility vehicle with two passengers when it overturned at a Y-intersection and went down an embankment. None of the occupants were wearing seat belts. All three were ejected during the accident, resulting in the Soldier and one of the passengers suffering fatal injuries. Police reports stated alcohol was a factor in the crash.

CLASS A

A Soldier was operating a borrowed all-terrain vehicle at an estimated 40 mph in a 15-mph zone when he apparently lost control and was thrown into several trees. Although he wore a helmet, it was not properly fastened and came off during the crash. The Soldier died of head injuries.

CLASS A

■ A Soldier was driving a sport-utility vehicle with three passengers when it went off the road and overturned several times. None of the occupants were wearing seat belts and all were ejected during the crash. The Soldier and two passengers died from their injuries. According to police reports, alcohol was a factor in the crash.

CLASS A

■ A Soldier with a passenger was traveling more than 100 mph while street racing when the other vehicle cut in front of him. The Soldier lost control of his vehicle, crossed the centerline and collided with two oncoming vehicles. Both the Soldier and passenger were killed in the accident. The other vehicle fled the accident scene.

CLASS A

■ A Soldier with two other Soldiers riding as passengers was driving back to base when he ran off the road and struck a steel utility pole. The driver survived the accident, but both passengers were killed. Seat belt use was not reported; however, alcohol use was reported as a factor in this fatal crash.

POM



CLASS A

■ A Soldier was operating his motorcycle at high speed when he attempted to turn right onto another road and struck a vehicle head on. Although the Soldier had Motorcycle Safety Foundation training and was wearing the appropriate personal protective equipment, including a Department of Transportation-approved helmet, he suffered a permanent total disability injury.

CLASS A

■ A Soldier was intoxicated and operating his motorcycle at high speed when he failed to negotiate a turn and struck a curb and median barrier. The



Soldier was thrown from his bike and died from head injuries. Though the Soldier had completed the MSF's Experienced RiderCourseSM, he did not wear the helmet he had with him.

SOLDIERS KNOW TO WEAR HELMETS IN COMBAT; SO, WHY DON'T THEY WEAR ONE ON A MOTORCYCLE?

POV DRIVING LOSSES
FY07

thru June 2007

Class A accidents/Soldiers killed

CARS	28/31
SUV/ JEEPS	12/12
TRUCKS	15/12
MOTORCYCLES	23/21
OTHER*	3/3

*Includes: vans and ATVs

79

TOTAL DEATHS

06 FY06: 87 3 year average: 93



WEAR YOUR SEAT BELTS!



■ A Soldier was driving his pickup truck home on a Saturday night when he crossed the centerline and struck four oncoming vehicles. His vehicle then ran off the road into a parking lot and overturned. The Soldier, who was not wearing his seat belt, was partially ejected and died from his injuries.



**IN AN ACCIDENT, DO YOU
REALLY THINK YOU CAN
ESCAPE INJURY WITHOUT
WEARING A SEAT BELT?**

CLASS B

■ A Soldier accelerated, pulled a wheelie and passed several vehicles after a traffic light turned green. A pickup truck in the oncoming lane turned in front of the motorcycle, which struck the pickup's front passenger-side bumper and brush guard. The Soldier was thrown from his motorcycle and suffered a broken arm and an amputated left foot.

Personnel Injury



CLASS A

■ A Soldier drowned after falling into a river while on combat patrol. A second Soldier who also fell in the river was able to swim to safety. Both Soldiers were wearing full combat gear.

CLASS A

■ A Soldier suffered fatal injuries when he was struck by 5.56 mm rounds while participating in a dismounted convoy live-fire training exercise.

CLASS A

■ A Soldier died after collapsing during part of his Army Physical Fitness Test.

CLASS A

■ A Soldier died after receiving an electric shock. The Soldier was emplacing barriers when the crane he was operating touched a live overhead power wire.

CLASS A

■ A Soldier and his son were canoeing in a creek in fast-moving water when they left the canoe to swim ashore to avoid a waterfall. The Soldier did not reach the shore and died after going over the waterfall.

CLASS A

■ A Soldier was walking down a roadway at night when he was struck and killed by a taxi.

CLASS B

■ A Soldier suffered a permanent partial disability when

an artillery simulator went off in his hand as he attempted to throw it. The Soldier lost all the fingers on his right hand down to the second knuckle and part of his thumb.

CLASS B

■ A Soldier suffered a permanent partial disability when he dropped a tow-bar on his hand, trapping his finger between the bar and a HMMWV bed. As a result, the Soldier's finger was degloved and later amputated.

CLASS B

■ A Soldier suffered a permanent partial disability when he accidentally discharged a round from his weapon into his toe.

CLASS B

■ A Soldier suffered a permanent partial disability while opening the loader's hatch on an M1A1. The Soldier placed his right hand on the lower right side of the hatch, catching his finger between the hatch and the latch.

ALWAYS

ENGAGED

YOUR JOB AS A SOLDIER AND
LEADER NEVER ENDS. TAKE CARE
OF YOURSELF AND TAKE CARE OF
EACH OTHER ON AND OFF DUTY.

IF YOU DON'T, WHO WILL?

ARMY SAFE
IS ARMY STRONG



<https://crrc.army.mil>



ARMY STRONG.

UNDER THE

BEFORE

DURING

AFTER

Know risks and danger signs
Develop plans for what to do
Assemble a disaster supplies kit
Volunteer to help others
Conduct rehearsals

Put your plans into action

Help others

Follow advice and guidance of officials

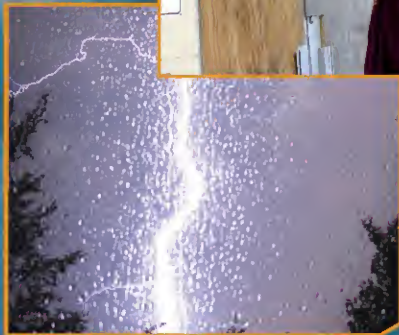
Repair damaged property

Take steps to prevent or reduce future

Restock your emergency supplies



WEATHER?



U.S. ARMY

ARMY STRONG.



U.S. ARMY COMBAT READINESS CENTER

<https://crc.army.mil>



101

Critical Days of
SUMMER
26 May - 3 Sept 2007



Never Give Safety A Day Off

**STAY IN CONTROL.
IF YOU PLAN TO DRINK,
DESIGNATE A NON-DRINKING DRIVER.**

**ARMY SAFE
is ARMY STRONG**



U.S. ARMY

ARMY STRONG.



U.S. ARMY COMBAT READINESS CENTER

<https://crtc.army.mil>



101

101 Critical Days of
SUMMER

28 May - 3 Sept 2007

Never Give Safety A Day Off

CHECK

YOURSELF

OR SOMEONE
ELSE WILL

